DOCUMENT RESUME

ED 418 350 CG 028 369

AUTHOR Slicker, Ellen K.; Kim, Jwa K.

TITLE Parenting Style and Family Type Revisited: Longitudinal Relationship to Older Adolescent Behavioral Outcome.
PUB DATE 1996-08-09
NOTE 25p.; Paper presented at the Annual Meeting of the American Psychological Association (104th, Toronto, Canada, August 9-13, 1996).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adjustment (to Environment); Attachment Behavior; Child Rearing; Correlation; *Family Relationship; Family Structure; High Schools; Higher Education; Longitudinal Studies; *Parent Child Relationship; *Parent Influence; *Student Attitudes
IDENTIFIERS Adolescent Behavior; Family Adaptability Cohesion Evaluation Scales; *Parenting Styles

ABSTRACT

Nearly 30 years ago, research showed that preschool children reared by parents with differing parenting attitudes or styles, differed in their degrees of social competence. To test this theory, a two-year study was conducted. During "Year 1," 2,250 high school seniors and 406 university freshmen from the middle South were surveyed regarding their perceptions of their parents' parenting style, their families' family type, and their own participation in a variety of problem behaviors. Significant results at "Year 1" indicated that, in regard to behavioral outcome, "authoritative" parenting was superior to "indulgent" and "neglectful" parenting, and that "balanced" and "moderately balanced" family types were superior to "mid-range" and "extreme" family types. In "Year 2" (N=261), significant differences among parenting styles and family types persisted even when "Year 2" scores were statistically adjusted for those from "Year 1." Although many participants had left the direct influence of their families, authoritative parenting continued to be superior to "neglectful," "indulgent," "authoritarian," or "middle range" parenting. Also the "balanced" family type continued to demonstrate superiority over the "extreme" type in providing resiliency against some problem behaviors. The results expand the growing literature regarding the continuing influence of home environment on older adolescent behavioral outcome. Summary tables showing covariate analyses are included. (EMK)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 418 350

Parenting Style and Family Type Revisited: Longitudinal Relationship to Older Adolescent Behavioral Outcome

Ellen K. Slicker, Ph.D. and Jwa K. Kim, Ph.D.

Middle Tennessee State University

Murfreesboro, Tennessee

Paper presented at the 104th Annual Convention of the

American Psychological Association

Toronto, Canada

August 9-13, 1996

Phone: (615) 898-5966

Email: eslicker@frank.mtsu.edu

August 9; 12:00-12:50 PM

Exhibit Hall, Metro Toronto

Convention Centre

CG028369

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

E SLICKER

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

Abstract

During Year 1 of the current longitudinal study, 2250 high school seniors and 406 university freshmen from the middle South were surveyed regarding their perceptions of their parents on parenting style (Baumrind, 1991; Steinberg et al., 1994), their families on family type (FACES II; Olson et al., 1982), and their own participation in a variety of problem behaviors. Significant results at Year 1 indicated that, in regard to behavioral outcome, authoritative parenting was superior to indulgent and neglectful parenting (Slicker, 1996b) and that balanced and moderately balanced family types were superior to mid-range and extreme family types in these older adolescents (Slicker, 1996a). In this Year 2 study, the majority of the Year 1 students were re-contacted, and 261 participated. Significant differences among parenting styles and family types persisted even when analyses of covariance (ANCOVAs) were completed, statistically adjusting the Year 2 scores for those from Year 1. Year 2 results indicated that, although in many cases these older adolescents had left the direct influence of their families, significant differences among parenting styles remained in 4 of the 8 problem behavior areas and significant differences among family types remained in 2 of the 8 areas. Authoritative parenting continued to be superior to neglectful, indulgent, authoritarian, or middle range parenting. Also, the balanced family type continued to demonstrate superiority over the extreme type in providing resiliency against some problem behaviors. Results of this study provide unique evidence and, thereby, expand the growing body of literature regarding the continuing influence of home environment (parenting style and family type) on older adolescent behavioral outcome.

Parenting Style and Family Type Revisited:

Longitudinal Relationship to Older Adolescent Outcome

Nearly 30 years ago Baumrind (1967, 1971) noted that preschool children reared by parents with differing parenting attitudes, or styles, differed in their degrees of social competence. Her theory-derived parent classification resulted in the original parenting style prototypes: authoritative, authoritarian, and permissive. Later researchers split the permissive type into permissive-indulgent and permissive-indifferent (Baumrind, 1978; Maccoby & Martin, 1983) as a result of a two-dimensional (demandingness and responsiveness) typology of parenting patterns. The resultant fourfold scheme established the four parenting styles which are commonly employed in today's research literature (e.g., Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994): authoritative, authoritarian, indulgent, and neglectful.

A typology considers the additive and multiplicative effects of parenting dimensions not possible through studying these dimensions independently (Rollins & Thomas, 1979). Baumrind's typological parenting style theory (1971) implies that the manner in which parents "reconcile the joint needs of children for nurturance and limit-setting" (Baumrind, 1991a, p. 62) has a major impact on the degree of social competence achieved as well as on the behavioral outcome of these children. Others (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Steinberg, Elmen, & Mounts 1989) have continued to increase the age range for which significance of parenting style applies. Significant differences in behavioral outcome have been found not only in children but also in early and middle adolescents reared by parents using the four "classic" parenting styles. Those behavioral and psychosocial characteristics that have been reported in the literature as associated with parenting style include social competence (Baumrind, 1991a; Lamborn et al., 1991; Steinberg, 1990), academic achievement (Dornbusch et al., 1987; Lamborn et al., 1991; Steinberg, Mounts, Lamborn, & Dornbusch, 1991; Steinberg et al., 1989), self-reliance (Steinberg et al., 1991), psychological distress and delinquency (Lamborn et al., 1991; Steinberg et al., 1991), substance use (Baumrind, 1991a), adolescent drinking and delinquency (Barnes & Farrell, 1992), and peer group selection (Brown, Mounts, Lamborn, & Steinberg, 1993). In general, the results of these studies indicate that adolescents reared by authoritative parents experience the most favorable outcomes, while those reared by neglectful parents have outcomes that are least favorable in regard to psychological adjustment and social conduct. The "middle two"

parenting styles (authoritarian and indulgent) have resulted in mixed outcomes for the adolescent population (Steinberg & Darling, 1994).

While prior research completed in the areas of parenting style had progressed by stages through a theory applied initially to preschoolers, then to children, to young adolescents, and finally, to adolescents in high school, no literature existed that carried this theoretical model into an older adolescent population. Laurence Steinberg, one of the foremost researchers in this area, believed this would be an important line of research to pursue (personal communication, 9/30/94) and provided his most recent measure for use in the Year 1 study. Year 1 results found that, in a sample of graduating high school seniors and second semester university freshmen, parenting style was significantly related to behavioral outcome using a constellation of eight problem behaviors as dependent variables (see Table 1). Authoritative parenting was negatively associated with problem behaviors, while the converse was true for indulgent and neglectful parenting styles. Authoritarian and middle range parenting (a style added for the Year 1 study), while adequate to prevent some of the negative effects, did not provide the resiliency necessary to produce positive results in the majority of the outcome variables. The first-year study expanded the previous range of four parenting styles to five and extended the age range for which this theoretical typology applies from high school students in general to graduating high school seniors and university freshmen.

In addition to parenting style, family type was also considered in the Year 1 study. Olson et al. (1992) devised the Circumplex Model of family interaction that primarily considered two facets of family functioning: adaptability and cohesion. From the Olson et al. family inventories, the Family Adaptability and Cohesion Scale (FACES II; Olson, Portner, & Bell, 1982) was chosen as the measure of family type. With the currently recommended linear scoring of this scale, Olson and colleagues found that higher levels of flexibility and connection within a family predicted greater functionality of that family (Olson, 1993).

The bulk of prior FACES research had involved the discriminate power of the Circumplex Model in distinguishing between families experiencing some malady and those without (Olson, 1993). In these studies, the investigator considered whether a larger percentage of subjects in afflicted families fell within the expected dysfunctional family types by virtue of their low cohesion and adaptability scores and whether a greater proportion of those not afflicted gained higher scores in adaptability and cohesion, thus placing them in the more functional family types. While useful, this method did not help us to understand how parents in functional families behave, nor did it provide us with an outcome gauge to determine the result of having

lived in a "functional" or "dysfunctional" family from a generally "normal" population. Year 1 of the present longitudinal study determined that family type was significantly related to specific behavioral outcomes in older adolescents (see Table 2). The balanced and moderately balanced family types were negatively associated with problem behaviors while the mid-range and extreme family types were positively associated with those problem behaviors.

Although prevailing wisdom suggests that parental importance all but disappears by the time older adolescents reach college age, there is a growing body of research to suggest that this is not the case (Steinberg & Darling, 1994). Parenting style effects appear to continue both indirectly, through the playing out of long-established patterns in the youth's behavior, and directly, through continuity in parenting practices over time and continued contact with parents. Therefore, we hypothesized for the Year 2 study that the influence of parenting style and family type would persist, even when statistically controlling for Year 1 behavioral outcome scores.

Procedure

Review of Year 1 Study

This longitudinal study was begun during the spring semester of 1995 via self-report surveys administered to 2250 graduating high school seniors in 14 high schools in the middle South region as well as to 406 second-semester college freshmen from a large state university in the same region. Students indicated their level of personal participation in a variety of problem behaviors (school misbehavior, drinking problems, alcohol use, drug use, theft / deceit, risky sex, aggression, and delinquency). The students also rated their perceptions of their parents on two parenting dimensions: behavioral control (parental limit-setting and monitoring) and acceptance (emotional nurturance and warmth) and on two family type dimensions: adaptability (flexibility in family roles) and cohesion (emotional bonding among family members). Based on high, moderate, and low values of the parenting dimensions (as per the typology), students were assigned to one of five groups representing the parenting style with which they were reared: authoritative, authoritarian, "middle range," indulgent, and neglectful. Based on high, moderately high, moderately low, and low values on the combined family type dimensions (as per published norms), students were assigned to one of four family types, representing the type in which they were reared: balanced, moderately balanced mid-range, and extreme.

Measures

Internal consistency reliability (coefficient alpha) is provided for Year 1 (alpha 1) as well as Year 2 (alpha 2) for each scale. In addition, test-retest reliability is given for a two-week intervening time interval (r_2) and again for a 52-week intervening time interval (r_{52}) which is the correlation between the scales at Year 1 and Year 2.

Parenting Style

Behavioral control. The 8-item behavioral control subscale assessed the degree of parental limit-setting and monitoring of the adolescent, as well as parental demands for mature behavior in the adolescent. It included such items as "In a typical week at home, what is the latest you can stay out on Friday and Saturday night?" and "How much do your parents try to know what you do with your free time?" with three possible responses ranging from "none" to "alot." (Alpha 1 = .78; alpha 2 = .77; r_2 = .70; r_{52} = .54).

Acceptance. The 9-item acceptance subscale assessed the older adolescents' perceptions of involvement, responsiveness, warmth, and nurturance of their parents. Items such as "My family does fun things together" and "My parents spend time just talking to me" were scored on a four-option Likert scale from "agree strongly" to "disagree strongly." (Alpha 1 = .79; alpha 2 = .79; r_2 = .88; r_{52} = .65)

In order to determine parenting style groups, first, scores on each of the parenting dimension subscales were divided into three groups following the procedure used by Baumrind (1991a, 1991b). The high group on each subscale was defined as all those parents with scores greater than or equal to 1/2 standard deviation above the mean for that subscale, while members of the low group were those falling at or below 1/2 standard deviation below the mean. Medium-low to medium-high scorers (those falling closer to the mean, between the high and low groups) formed the middle group. A division such as this, although sample specific, assured that marked differences would appear among groups so designated for this normal population.

Then using the classic typology, parents were categorized into the first four parenting style groups. Authoritative parents were those in the high groups on both behavioral control and acceptance. Authoritarian parents were those high on behavioral control, but in the low group on acceptance. Indulgent parents were high on acceptance, but low on behavioral control. Neglectful parents were low on both behavioral control and acceptance.

An additional parenting style was also defined for this study using the same categorical approach. The fifth parenting style, "middle range" parents, were those who fell within the

middle group on both behavioral control and acceptance (see Baumrind's "good enough" parents, 1991a). Although the method of using only extreme types of parenting tends to strengthen internal validity of a study (Steinberg et al., 1994), by including a portion of those parents who fall within the moderate ranges of the parenting dimensions (i.e., middle range parents), external validity is also strengthened. In addition, inclusion of a more moderate parenting style allows examination of older adolescent behavioral outcome results in other than "extreme" parenting styles.

Family Type

Adaptability. The 14 -item adaptability scale (FACES II) assessed the older adolescents' perceptions of their families' ability to change in regard to negotiation style, power structure, role relationships, and response to situational and developmental stress (Olson et al., 1992). This scale included such items as "It is hard to know what the rules are in our family" and "Each family member has input into major family decisions" with 5 response choices, ranging from "almost never" to "almost always." (Alpha 1 = .73; alpha 2 = .73; r_{S2} = .66.)

Cohesion. The 16-item cohesion scale (FACES II) assessed the older adolescents' perceptions of the emotional bonding that members of their families have toward one another in the areas of family boundaries, friends, time, space, decision-making, interests, and recreation (Olson et al., 1992). It included items such as "Family members feel very close to each other" and "We have difficulty thinking of things to do together as a family" with the same 5 response choices as above. (Alpha 1 = .55; alpha 2 = .41; r_{S2} = .70.)

In order to determine family type, adolescent self-reported scores on both adaptability and cohesion were totaled. Then, via published norms (Olson et al., Circumplex Model, 1992), students were categorized into one of four levels on each subscale. Once placed in a numerically ranked adaptability category (range = 1.0 - 4.0) and cohesion category (range = 1.0 - 4.0), the ranks were combined and averaged. This placed the family in one of the four family types (theoretically, most functional to least functional): balanced (range = 3.5 - 4.0), moderately balanced (range = 2.5 - 3.0), mid-range (range = 1.5 - 2.0), and extreme (0.5 - 1.0).

Problem behavior

Scales used were those found in the adolescent literature. An attempt was made to include variables representing a wide variety of problem behaviors and those most typically mentioned in numerous prior studies. Problem behavior was measured by eight standardized subscales with varying numbers of items per subscale, each item containing five response options ranging from "never" to "6 or more times." Unless otherwise noted, the students were

asked about their involvement "during the past year" in a variety of problem behaviors. Self-report of problem behavior has been used by many researchers (e.g., Hirschi, 1969; Jessor & Jessor, 1977; Kline, Canter, & Robin, 1987) and has been shown to be reasonably reliable and valid (Oetting & Beauvais, 1990; Patterson & Stouthamer-Loeber, 1984), perhaps even more so than police records which suffer from under-reporting (McCord, 1990).

The 5-item school misbehavior subscale (alpha 1 = .72; alpha 2 = .55; r_2 = .65; r_{52} = .40) addressed issues from copying a classmate's assignment to skipping class or work without any real excuse (Dornbusch et al., 1985; Gold & Mann, 1972; Lamborn, Brown, Mounts, & Steinberg, 1992; Ruggiero, 1984; Windle, 1993). The 9-item drinking problems subscale (alpha 1 = .75; alpha 2 = .67; r_2 = .83; r_{52} = .55) asked, for example, how often "within the past year" the student had been drunk or very high or had been in trouble with other individuals (e.g., parents, friends, teachers, police), each mentioned separately (Barnes, 1984; Jessor & Jessor, 1977). In addition, students were asked how many times "within your lifetime" they had been arrested for drunken driving or arrested for other drunken behavior (Jessor & Jessor, 1977). The 2-item alcohol use scale (alpha 1 = .87; alpha 2 = .88; r_2 = .85; r_{52} = .67) was formed by combining the frequency of drinking, self-reported on a 5-point scale from "never" to "daily," with amount. Amount was also self-reported on a 5-point scale ranging from "0" to "more than 10" "beers, wine coolers, glasses of wine or mixed drinks" consumed "each time you drink (during one day or in one evening)" (Barnes, 1978, 1984; Rachal et al., 1975). The 5-item drug use scale (alpha 1= .70; alpha 2 = .53; r_2 = .74; r_{52} = .73) asked how often the student used: marijuana; an hallucinogen (acid, LSD, etc.); and cocaine, crack, stimulants, or other hard drugs (Jessor & Jessor, 1977; Ruggiero, 1984). An item asking the number of cigarettes smoked per day was included (Windle, 1993), and finally, the students were asked "Are you high on any substance right now?" which required a "yes" or "no" response. The 2-item lie scale and 3-item steal scale were combined to form a 5-item deceit/theft scale with increased reliability over the other two scales separately (alpha 1= .65; alpha 2 = .44; r_2 = .68; r_{52} = .43). The questions ranged from how often students used a phony ID to how often they took something from someone else worth over $30 (Barnes, 1984; Gold, 1970; Gold & Mann, 1972; Ruggiero, 1984; Steinberg et al., 1991; Windle, 1993). The 3-item sex risk scale (alpha 1 = .48; alpha 2 = .71; r_2 = .93; r_{52} = .72) asked whether the student was sexually active (Jessor & Jessor, 1977), and, if so, how often condoms were used during sexual intercourse, on a scale from "never" to "always," and asked if the respondent had ever been pregnant (or if male: ever participated in causing a pregnancy to happen). The 5-item aggression subscale

(alpha 1= .73; alpha 2 = .60; r_2 = .72; r_{s2} = .46) queried frequency of involvement in activities ranging from damaging or vandalizing something not belonging to them to taking part in a fight where a group of friends were against another group (Barnes, 1984; Gold, 1970; Gold & Mann, 1972; Ruggiero, 1984; Steinberg et al., 1991; Windle, 1993). Finally, a 3-item delinquency (alpha 1= .55; alpha 2 = .21; r_{s2} = .53) scale asked the students "during your lifetime how many times have you been stopped for..." and "how many times have you actually been arrested or placed on probation for... something you did or they thought you did (not traffic violations)?" The lifetime occurrence of running away from home with intentions of staying away was also queried on this subscale (Dornbusch et al., 1985; Gold & Mann, 1972; Windle, 1993).

Year 2 Study

Older adolescents from the Year 1 study (Slicker, 1996b; 1996a) for whom addresses were available were re-contacted and asked to complete a similar survey for Year 2, providing 261 participants. Most of these individuals continued to reside in the middle South and most continued to be enrolled in a post-secondary institution. The proportions of respondents were 26.1% male and 73.9% female (90.8% Caucasian). These older adolescents (30.3%, age 18 years; 46.4%, age 19 years, 21.1%, age 20 years) were asked once again to report on their current levels of involvement in various problem behaviors (school / work misbehavior, drinking problems, alcohol use, drug use, deceit/theft, sex risk, aggression, and arrests). Parenting style groups (authoritative, authoritarian, middle range, indulgent, and neglectful) and family type groups (balanced, moderately balanced, mid-range, and extreme) established in Year 1 were retained as the independent variables in Year 2.

Results

Table 3 contains descriptive statistics from both years for each total sample. The decreases in standard deviations are reflected in more restricted ranges for this sample due to smaller sample size in Year 2.

An analysis of covariance (ANCOVA) was performed for parenting style and then for family type on each Year 2 problem behavior scale, statistically controlling for Year 1 scores. This allowed us to examine the continuing impact of parenting style and family type separately on changes in the outcome variables over the 12 month period between Year 1 and Year 2.

A significant difference among parenting style means ($p < .05$) persisted in Year 2 for school / work misbehavior, drug use, deceit / theft, and delinquency, and approached significance ($p < .10$) in the areas of drinking problems and sex risk (see Table 4). In considering family type for Year 2, school / work misbehavior and aggression were the areas in

which significant differences ($p < .05$) among family types persisted (see Table 5). For those variables with significant ANCOVA results, pairwise comparisons on least squares means were completed. In these pairwise comparisons, type I familywise error was controlled for parenting style and for family type. Effect sizes presented in Tables 5 and 6 were calculated for Year 2 means, using Cohen's *f* . According to convention, .10 is considered small, .25 is considered moderate, while .40 is considered a large effect size. Moderately large effect sizes were evident for 7 of the 8 dependent variables with regard to parenting style. Those for family type were not as great, suggesting a more tenuous relationship between family type and behavioral outcome than between parenting style and the outcome variables.

School / work misbehavior (such as cheating, copying others' work, skipping classes / work) was significantly more prevalent in older adolescents who were reared by authoritarian parents that those who were authoritatively reared even after statistically controlling for Year 1 scores. In addition, there continued to be more of this kind of misbehavior among adolescents from the extreme family type (disengaged, yet rigid) than those from balanced families (emotionally close, yet flexible).

Drug, but not alcohol, use remained significantly more pronounced in older adolescents reared by indulgent parents than those reared in authoritative homes. Since alcohol consumption (and often resultant drinking problems) is highly prevalent among most older adolescents, it should not be surprising that significant differences did not appear among parenting or family type groups in this area. In fact, amount of alcohol consumption increased across all parenting style and family type groups.

Deceit / theft is a scale that considers behaviors such as using a phony ID, trying to get something by lying, and taking money or possessions from someone else. Whereas at Year 1 deceit / theft was significantly greater in offspring of all other parenting styles than in those of authoritative parents, at Year 2 offspring of middle range parents were still participating in significantly more deceit/theft than were those older adolescents reared by authoritative parents even after adjusting for Year 1 scores. Significant differences on family type did not appear.

Sex risk (such as numerous sexual partners, early age at first sex, infrequent condom use, pregnancy) increased for adolescents from all parenting styles and all family types for Year 2 resulting in no significant differences among these groups. Increase in sexual activity is a developmental expectation in older adolescents.

In regard to aggression, although continued significant differences did not remain among older adolescents reared by various parenting styles, a significant difference did persist between balanced and extreme family types. This indicates that older adolescents from highly cohesive and adaptable families continued to participate in significantly less aggressive behavior (carrying a weapon, physical fighting, hitting adults, gang activity) than did older adolescents from disengaged, rigid families.

Finally, delinquency (being stopped by and/or arrested by law authorities for illegal activities) was found to prevail for those older adolescents reared by neglectful parents over those reared by authoritative parents. Family type was not related to delinquency in the Year 2 results.

Conclusions

Parenting style and family type were shown in the Year 1 study to be significantly related to behavioral outcome in older adolescents (high school seniors and university freshmen; see Tables 1 and 2). Specifically, the study demonstrated the clear superiority of authoritative parenting (high levels of responsiveness and behavioral control) and of a balanced family type (high levels of cohesiveness and adaptability). The Year 2 study demonstrates that many of those significant relationships in regard to behavioral outcome continue even after 12 months. Although neither Year 1 nor Year 2 results can provide clear directionality for the above-mentioned relationships, the longitudinal results (adjusted for Year 1 scores) provide evidence of a persistent influence of parenting style and family type even in the early-college years.

Limitations of this study include the usual drawbacks and potential for bias (such as common source and method variance) found in any self-report research using a single informant. Poor response rate (a problem inherent in longitudinal research) afflicted this study, as well, with only 10% of the original sample responding in Year 2. Although hand-delivery of surveys, phone call reminders, and second-survey mailings were employed, there was no monetary remuneration given (although approximately 1/3 of the respondents did receive extra credit from an instructor to apply to one class in which they were enrolled). Finally, as a consequence of categorization into the parenting style typological schema, 40% of the respondents (those who did not fit a particular style) were eliminated from the analyses of parenting style. This practice, however, strengthens internal validity by using only extreme types. External validity, while limited somewhat by the categorization, was also strengthened by including at least a portion of those students whose parents fell within the moderate ranges (middle range parenting) on the parenting dimensions.

BEST COPY AVAILABLE

There has been considerable research concerning the effects of parenting practices on childhood, and even middle adolescent, behavioral adjustment. The present line of research extends the age range and breadth of the parenting style studies begun by Baumrind, demonstrating parental behavior necessary to promote positive outcomes in older adolescents. In addition, the family type research completed on a normal population expands and more clearly delineates Olson's Circumplex Model (1982, 1992, 1993). Evidence is noted of a generally linear relationship among the family types on most of the outcome variables. The results of the statistical procedures used in this study appear to be more useful than the sorting procedure used in much of the previous family type research. One-year follow-up finds maintenance of differences among parenting styles and family types in older adolescents with continued evidence for the superiority of certain parenting styles and family types even after these youth have begun to establish autonomy from their parents. These findings expand the growing body of literature regarding the enduring effects of home environment. This suggests that parental importance does not automatically cease with the completion of puberty and that, indeed, parental presence continues to be influential in older adolescent psychosocial development.

References

Barnes, G. (1984). Adolescent alcohol abuse and other problem behavior: Their relationships and common parental influences. Journal of Youth and Adolescence, 13, 329-348.

Barnes, G., & Farrell, M. (1992). Parental support and control as predictors of adolescent drinking, delinquency, and related problem, behaviors. Journal of Marriage and the Family, 54, 763-776.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. Genetic Psychology Monographs, 75, 43-88.

Baumrind, D. (1971). Current patterns of parental authority. Developmental Psychology Monographs, 4(1, part 2), 1-103.

Baumrind, D. (1978). Parental disciplinary patterns and social competence in children. Youth and Society, 9, 239-276.

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. Journal of Early Adolescence, 2(1), 56-95.

Brown, B., Mounts, N., Lamborn, S., & Steinberg, L. (1993). Parenting practices and peer group affiliation in adolescence. Child Development, 64, 467-482.

Dornbusch, S., Carlsmith, J., Bushwall, S., Ritter, P., Leiderman, H., Hastorf, A., & Gross, R. (1985). Single parents, extended households, and the control of adolescents. Child Development, 56, 326-341.

Dornbusch, S., Ritter, P., Leiderman, P., Roberts, D., & Fraleigh, M. (1987). The relation of parenting style to adolescent school performance. Child Development, 58, 1244-1257.

Gold, M. (1970). Delinquent behavior in an American city. Belmont, CA: Brooks/Cole.

Gold, M., & Mann, D. (1972). Delinquency as a defense. American Journal of Orthopsychiatry, 42, 463-479.

Hirschi, T. (1969). Causes of delinquency. Berkeley: University of California Press.

Jessor, R., & Jessor, S. (1977). Problem behavior and psychosocial development: A longitudinal study of youth. New York: Academic Press.

Kline, R., Canter, W., & Robin, A. (1987). Parameters of teenage alcohol use: A path analytic conceptual model. Journal of Consulting and Clinical Psychology, 55, 521-528.

Lamborn, S., Brown, B., Mounts, N., & Steinberg, L. (1992). Putting school in perspective: The influence of family, peers, extracurricular participation, and part-time work on academic

BEST COPY AVAILABLE

engagement. In F. Newmann (Ed.) Student engagement and achievement in American secondary schools (pp. 153-181). New York: Teachers College Press.

Lamborn, S., Mounts, N., Steinberg, L., & Dornbusch, S. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. Child Development, 62, 1049-1065.

Maccoby, E., & Martin, J. (1983). Socialization in the context of the family: Parent-child interaction. In E. Hetherington (Vol. Ed.), P. Mussen (Series Ed.) Handbook of child psychology, Vol. IV: Socialization, personality, and social development (pp. 1-101).

McCord, J. (1990). Problem behaviors. In S. Feldman & G. Elliott (Eds.) At the threshold: The developing adolescent (pp. 414-430). Cambridge, MA: Harvard University Press.

Oetting, E., & Beauvais, F. (1990). Adolescent drug use: Findings of national and local surveys. Journal of Consulting and Clinical Psychology, 58, 385-394.

Olson, D. (1993). Circumplex model of marital and family systems: Assessing family functioning. In R. Walsh and G. Froma (Eds.), Normal family processes (pp. 104-137). New York: Guilford Press.

Olson, D., McCubbin, H., Barnes, H., Larsen, A., Muxen, M., & Wilson, M. (1992). Family inventories (2nd Rev.) St. Paul, MN: Family Social Science.

Olson, D., Portner, J., & Bell, R. (1982). FACES II: Family adaptability and cohesion evaluation scale. St. Paul, MN: Family Social Science.

Patterson, G., & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. Child Development, 55, 1299-1307.

Rachal, J., Williams, J., Brehm, M., Cavanaugh, B., Moore, R., & Eckerman, W. (1975). A national study of adolescent drinking behavior, attitudes and correlates. National Institute on Alcohol Abuse and Alcoholism. Washington, DC: U.S. Department of Health, Education, and Welfare.

Rollins, B., & Thomas, D. (1979). Parental support, power, and control techniques in the socialization of children. In W. Burr, R. Hill, F. Nye, & I. Reiss (Eds.) Contemporary theories about the family (vol. I; pp. 317-364). New York: The Free Press.

Ruggiero, M. (1984). Work as an impetus to delinquency: An examination of theoretical and empirical connections. Unpublished doctoral dissertation, University of California, Irvine.

Slicker, E. (1996a). Simultaneous consideration of parenting style dimensions and family type variables: Their comparability and redundancy. Manuscript in preparation, Middle Tennessee State University, Murfreesboro, TN.

Slicker, E. (1996b). Relationship of parenting style to behavioral adjustment in graduating high school seniors. Manuscript submitted for publication, Middle Tennessee State University, Murfreesboro, TN.

Steinberg, L. (1990). Autonomy, conflict, and harmony in the family relationship. In S. Feldman & G. Elliott (Eds.), At the threshold: The developing adolescent (pp. 255-276). Cambridge, MA: Harvard University Press.

Steinberg, L., & Darling, N. (1994). The broader context of social influence in adolescence. In R. Silbereisen & E. Todt (Eds.), Adolescence in context: The interplay of family, school, peers, and work in adjustment (pp. 25-45). New York: Springer-Verlag.

Steinberg, L., Elmen, J., & Mounts, N. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. Child Development, 60, 1424-1436.

Steinberg, L., Lamborn, S., Darling, N., Mounts, N., & Dornbusch, S. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. Child Development, 65, 754-770.

Steinberg, L., Mounts, N., Lamborn, S., & Dornbusch, S. (1991). Authoritative parenting and adolescent adjustment across various ecological niches. Journal of Research on Adolescence, 1, 19-36.

Windle, M. (1993). A retrospective measure of childhood behavior problems and its use in predicting adolescent problem behaviors. Journal of Studies on Alcohol, 54, 422-431.

Table 1. Summary of Univariate ANOVAs from the MANOVA Test for Year 1 on All Dependent Variables for Parenting Style

	Parenting Style							
	Authoritative	Authoritarian	Middle range	Indulgent	Neglectful	Univariate	Pairwise	Effect
	5	4	3	2	1	F	comparisons	size
Variable	(n=436)	(n=148)	(n=338)	(n=169)	(n=376)	df (4, 1457)	(p<.05)	*f*
School / work misbehavior	1.13 (.83)	1.38 (.99)	1.59 (.95)	1.68 (.99)	1.91 (1.10)	23.87***	1> 3> 5; 1> 4; 2> 5.	.28
Drinking problems	.22 (.37)	.32 (.54)	.42 (.47)	.52 (.51)	.59 (.64)	21.48***	1> 3> 5; 1,2> 4; 2> 5.	.27
Alcohol use	.83 (.97)	.93 (1.03)	1.43 (1.11)	1.83 (1.11)	1.75 (1.20)	40.50***	1,2> 3> 4,5.	.39
Drug use	.25 (.51)	.42 (.66)	.57 (.77)	.71 (.84)	.86 (.92)	28.39***	1> 3> 5; 1,2> 4; 2> 5.	.29
Deceit / theft	.17 (.34)	.47 (.78)	.47 (.64)	.50 (.69)	.67 (.84)	22.35***	1> 3,4> 5; 2> 5.	.26
Sex risk	.54 (.61)	.68 (.63)	.71 (.61)	.87 (.63)	.85 (.62)	17.53***	1,2,3> 5.	.20
Aggression	.13 (.37)	.30 (.60)	.32 (.53)	.37 (.65)	.50 (.77)	11.92***	1> 3,4> 5; 2> 5.	.22
Delinquency	.17 (.38)	.35 (.61)	.33 (.49)	.41 (.57)	.54 (.70)	16.67***	1> 3,4> 5; 2> 5.	.23

Note. N = 1467. Principal entries are means; standard deviations appear in parentheses below each mean. Parenting style X sex MANOVA: parenting style F (32, 5347) = 8.40, p<.0001, Wilks' Lambda = .835; sex F (8, 1450) = 33.63, p<.0001, Wilks' Lambda = .844; interaction - n.s.

***p < .0001.

BEST COPY AVAILABLE

Table 2. Summary of the Univariate ANOVAs from the MANOVA Test for Year 1 on All Dependent Variables for Family Type

	Family type						
Variable	Balanced 4 (n=224)	Moderately balanced 3 (n=761)	Mid-range 2 (n=871)	Extreme 1 (n=681)	Univariate F df (4,1457)	Pairwise comparisons (p<.05)	Effect size *f*
School /work misbehavior	1.14 (.88)	1.36 (.92)	1.62 (1.02)	1.74 (1.01)	25.93***	1,2> 3> 4.	.25
Drinking problems	.24 (.34)	.31 (.41)	.45 (.55)	.49 (.59)	19.66***	1,2> 3,4.	.21
Alcohol use	1.03 (1.12)	1.20 (1.08)	1.45 (1.15)	1.45 (1.17)	10.13***	1,2> 3,4.	.17
Drug use	.35 (.65)	.40 (.66)	.59 (.79)	.68 (.84)	18.17***	1,2> 3,4.	.19
Deceit / theft	.22 (.42)	.29 (.49)	.48 (.68)	.54 (.72)	24.47***	1,2> 3,4.	.23
Sex risk	.60 (.60)	.64 (.62)	.75 (.64)	.79 (.61)	11.14***	1,2> 3,4.	.13
Aggression	.14 (.38)	.22 (.48)	.35 (.63)	.41 (.63)	15.95***	1,2> 3,4.	.21
Delinquency	.21 (.42)	.27 (.47)	.37 (.59)	.45 (.65)	13.77***	1> 2> 3,4.	.17

Note. N= 2537. Principal entries are means; standard deviations appear in parentheses below each mean. Family type X sex MANOVA: family type F (24, 7315) = 5.53, p<.0001, Wilks' Lambda = .949; sex F (8, 2522) = 38.61, p<.0001, Wilks' Lambda = .891; interaction - n.s.

***p < .0001.

Table 3. Means, Standard Deviations, and Ranges of Dependent Variables at Year 1 and Year 2

Variable	Mean	sd	Range
Year 1 (N_1 = 2645)			
School misbehavior	1.54	1.00	0 - 4.00
Drinking problems	.41	.53	0 - 4.00
Alcohol use	1.34	1.14	0 - 4.00
Drug use	.54	.76	0 - 3.40
Deceit / theft	.43	.65	0 - 4.00
Sex risk	.72	.63	0 - 2.00
Aggression	.32	.59	0 - 4.00
Delinquency	.36	.58	0 - 4.00
Year 2 (N_2 = 261)			
School / work misbehavior	1.06	.69	0 - 3.80
Drinking problems	.28	.38	0 - 2.44
Alcohol use	1.23	1.00	0 - 3.50
Drug use	.26	.47	0 - 2.60
Deceit / theft	.20	.38	0 - 1.80
Sex risk	.92	.77	0 - 2.50
Aggression	.09	.28	0 - 2.20
Delinquency	.38	.47	0 - 2.00

Note. Potential range for all variables is 0 - 4.00.

Table 4. Summary of Univariate ANCOVA Tests for Year 2 on All Dependent Variables for Parenting Style with Pair Comparisons

	Parenting Style												
	Authoritative 5		Authoritarian 4		Middle range 3		Indulgent 2		Neglectful 1		Univariate F for parenting style	Pairwise comparisons[a]	Effect size[c]
	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2		p<.005[b] p<.05	
Variable	n = (436)	(56)	(148)	(17)	(338)	(28)	(169)	(22)	(376)	(26)			*f*
School / work misbehavior	1.13 (.83)	.83 (.58)	1.38 (.99)	1.32 (.70)	1.59 (.95)	1.23 (.75)	1.68 (.99)	1.25 (.55)	1.91 (1.10)	1.19 (.74)	2.54*	4 > 5; 3 > 5	.29
Drinking problems	.22 (.37)	.16 (.29)	.32 (.54)	.25 (.33)	.42 (.47)	.26 (.36)	.52 (.51)	.46 (.35)	.59 (.64)	.37 (.51)	2.05	~	2 > 4, 5	.30
Alcohol use	.83 (.97)	.87 (1.02)	.93 (1.03)	1.35 (.93)	1.43 (1.11)	1.14 (1.10)	1.83 (1.11)	1.82 (.95)	1.75 (1.20)	1.54 (.95)	1.23	~	2 > 3	.35
Drug use	.25 (.51)	.09 (.22)	.42 (.66)	.25 (.43)	.57 (.77)	.39 (.70)	.71 (.84)	.56 (.64)	.86 (.92)	.37 (.55)	2.58*	2 > 5;	2 > 4	.34
Deceit / theft	.17 (.34)	.06 (.16)	.47 (.78)	.05 (.11)	.47 (.64)	.27 (.41)	.50 (.69)	.25 (.46)	.67 (.84)	.33 (.45)	3.53*	3 > 5;	1 > 4, 5	.35
Sex risk	.54 (.61)	.60 (.73)	.68 (.63)	1.18 (.73)	.71 (.61)	.85 (.66)	.87 (.63)	1.21 (.75)	.85 (.62)	1.17 (.75)	2.25	~	1, 2 > 5	.36
Aggression	.13 (.37)	.03 (.15)	.30 (.60)	.06 (.15)	.32 (.53)	.09 (.24)	.37 (.65)	.12 (.30)	.50 (.77)	.15 (.36)	0.92	~	~	.18
Delinquency	.17 (.38)	.23 (.33)	.35 (.61)	.33 (.50)	.33 (.49)	.39 (.45)	.41 (.57)	.53 (.52)	.54 (.70)	.55 (.52)	2.93*	1 > 5;	2 > 5	.31

Note. N_1 = 1467. N_2 = 156. Principal entries are means; standard deviations appear in parentheses below each mean. Covariate for Year 2 is Year 1 score on each dependent variable, df (4, 150). Y1 = Year 1; Y2 = Year 2. [a]Least squares means used for pairwise comparisons. [b]p to control familywise error at .05. [c]Year 2 means used to calculate effect size (*f*).
*p < .05.

Table 5. Summary of Univariate ANCOVA Tests for Year 2 on All Dependent Variables for Family Type with Pair Comparisons

	Family type										
	Balanced 4		Moderately balanced 3		Mid-range 2		Extreme 1		Univariate F for family type	Pairwise comparisons[a]	Effect size[c]
	Y1	Y2	Y1	Y2	Y1	Y2	Y1	Y2			
Variable n =	(224)	(25)	(761)	(102)	(871)	(74)	(681)	(54)		p<.0083[b] p<.05	*f*
School / work misbehavior	1.14 (.88)	.63 (.55)	1.36 (.92)	1.04 (.59)	1.62 (1.02)	1.07 (.73)	1.74 (1.01)	1.28 (.81)	3.28*	1 > 4; 2, 3 > 4	.36
Drinking problems	.24 (.34)	.27 (.44)	.31 (.41)	.27 (.38)	.45 (.55)	.26 (.28)	.49 (.59)	.31 (.46)	0.61	~ ~	.05
Alcohol use	1.03 (1.12)	.93 (.98)	1.20 (1.08)	1.17 (1.02)	1.45 (1.15)	1.37 (1.00)	1.45 (1.17)	1.25 (.97)	2.10	~ 2 > 1	.17
Drug use	.35 (.65)	.12 (.28)	.40 (.66)	.27 (.50)	.59 (.79)	.30 (.56)	.68 (.84)	.25 (.36)	1.96	~ 3 > 1	.16
Deceit / theft	.22 (.42)	.06 (.18)	.29 (.49)	.15 (.32)	.48 (.68)	.20 (.37)	.54 (.72)	.31 (.48)	1.83	~ 1 > 4	.25
Sex risk	.60 (.60)	.90 (.83)	.64 (.62)	.79 (.77)	.75 (.64)	.97 (.75)	.79 (.61)	1.03 (.74)	0.86	~ ~	.12
Aggression	.14 (.38)	.00 (.00)	.22 (.48)	.06 (.22)	.35 (.63)	.11 (.27)	.41 (.63)	.14 (.41)	3.29*	1 > 4; 2 > 4	.20
Delinquency	.21 (.42)	.31 (.38)	.27 (.47)	.30 (.41)	.37 (.59)	.40 (.48)	.45 (.65)	.52 (.53)	1.21	~ ~	.21

Note. N_1 = 2537. N_2 = 251. Principal entries are means; standard deviations appear in parentheses below each mean. Covariate for Year 2 is Year 1 score on each dependent variable, df (3, 259). Y1 = Year 1; Y2 = Year 2. [a]Least squares means used for pairwise comparisons. [b]p to control familywise error at .05. [c]Year 2 means used to calculate effect size (*f*).
*p < .05.

BEST COPY AVAILABLE